The Selection and Use of ‘Foreign Stone’ at Shinewater Park

Late Bronze Age stone from a wetland platform

by
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Excluding struck and burnt flint, excavations on the platform recovered 74 pieces of stone, four from context A4, 56 from context B3, six from context B15, one from context B26, five from context B28, one from context B32 and one from context D4 (Table 1). However, many others lay about in the spoil or remained in the unexcavated section and it is clear that what we have represents only a tiny sample of the whole, both in terms of the site generally and by context. Excavations on the trackway recovered a further six, one from context A4, one from context B5, one from context B13 and three from context B15, and the watching brief at Dittons a further 21. In view of all three sites’ positions in what was otherwise stone-free peat, these clasts may be considered ‘foreign’, although none need have been brought far. In all four stone types are represented.

1. The Platform

The greater part of the platform assemblage, 70 clasts, falls within the pebble-size range and comprises Upper Greensand (Fig. 1). Most of these are cracked and friable, indicating exposure to and fragmentation by fire. In colour they are light grey, black or brown, i.e., they are unoxidized or reduced. It is uncertain if this relates to their burning or to their post depositional environment, but the grey colour of *all* the pottery from the site as well as that of flint head in similar environments around the edge of marsh strongly suggests the latter. 19 have smooth facets indicative either of water rolling, or, perhaps, their use as rubbers or querns prior to fragmentation. A single unburned clast of cobble-size is of a vivid green colour and closely resembles Upper Greensand outcropping in front of the Wish Tower on Eastbourne beach. A further four pebble-size clasts are Sarsen stone. One of these has a flat facet and all are cracked and friable. No burnt clasts are certainly derived from artefacts and it is possible that their primary role on site was related to burning.

Stone type	Context/ no of clasts						
	A4	B3	B15	B26	B28	B32	D4
Upper Greensand (total)	4	52	6	1	5	1	2
burnt	4	52	5	1	5	1	2
unburnt	0	0	1	0	0	0	0
faceted	2	12	1	1	1	0	2
Sarsen (total)	0	4	0	0	0	0	0
burnt	0	4	0	0	0	0	0
faceted	0	1	0	0	0	0	0
Quartzite	1	0	0	0	0	0	0

Table 1. ‘Foreign’ stone from the platform excavations

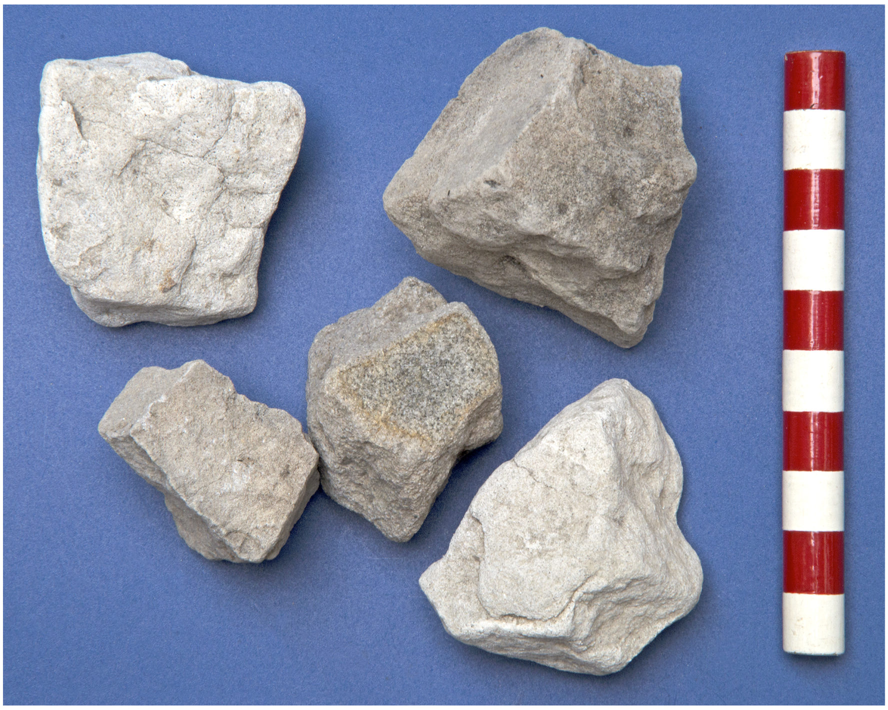

Figure 1. Burnt Upper Greensand from the platform. Note the grey colour, the fire-cracking (upper left) and the smooth facet (upper right). *Scale 80%*

Analogy with other stone finds' assemblages, and with the ethnographic record, suggest a variety of possible reasons for such activity. These include dry-cooking (Ramseyer 1991; Wandsnider 1997, 21), steam production (for saunas) (Barfield & Hodder 1987), wet-cooking (Wandsnider 1997, 19, 25) and the precipitation of salt (Barfield 1991, 62). Most of the burnt stone recovered comes from an extensive midden-like deposit (B3), which lay across the whole of the visible platform (Fig. 2), and there is no way of knowing what it was originally used for. However, in two contexts it may have been in a *primary* position. In one of these, B28, its position at the base of a small pottery vessel recommends a water-boiling hypothesis.[1] In the other, B32, it was found in the top of a raised hearth. This comprised 25% burnt flint and would have served as an effective 'storage heater', and, since the stone remained *in situ* after burning, it is reasonable to suggest that this was its primary role (cf. Seager Thomas 1999, 46). Upper Greensand, which is less explosive than flint, might have been brought on site for this purpose.

Part of a very large flat water rolled pebble of metamorphic quartzite was recovered from the top of context A4. In places it has been rubbed smooth while one edge and the surviving end show evidence of battering, indicating use both as a hone or polisher *and* a hammerstone. A thin grey weathering rind on both the original surface of the stone and the break show the latter to have occurred in antiquity.

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[1] But see my 2010 'Potboilers reheated' — MST 2014.

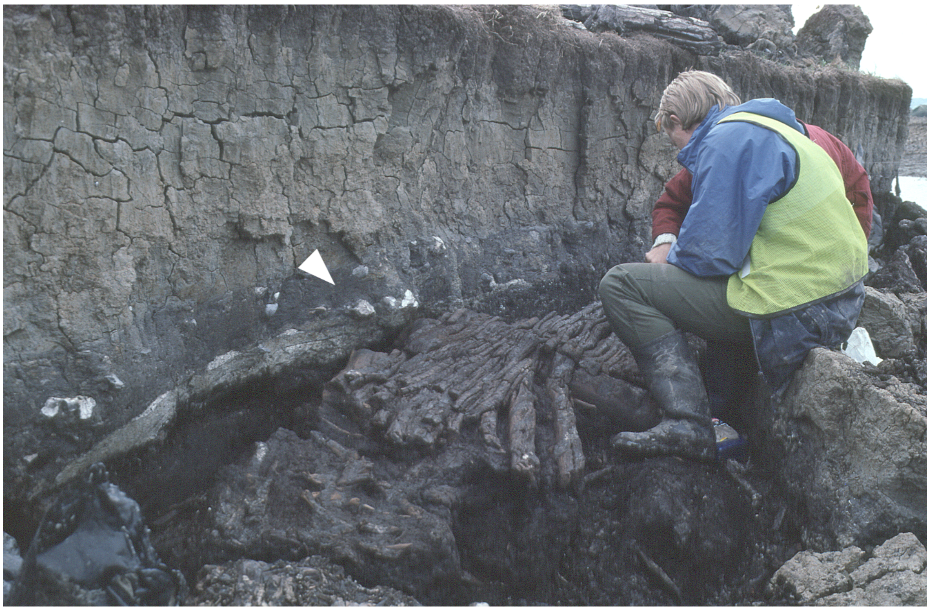

Figure 2. Section through the platform. Layer B3 arrowed

In the occupation layers of the site there were also a large number of dark grey, water rolled flints of large pebble to small cobble-size and a number of pieces of fresh chalk flint with clean white cortices, which can only have come from the Downs. These were *not* recovered. The water rolled flints were scattered throughout the layers overlying the platform whereas the nodular flint was concentrated in context B15, which lay directly on it (beneath B3) and on the surface of context A4, to the north east of the exposed area. The latter concentration may result from area A's excavation by unmonitored Hymac. Both flint types were found fire-cracked as well but their sorting and curation suggests that *initially* they were collected with something else in mind. The water rolled flints were perhaps hammer stones: they were generally ovoid in shape and much bigger than clasts thought elsewhere to be slingstones (*see* 3, below), and one retained traces of battering on one end. Chalk flint was used in the production of crude flint tools, many of which were found on site.

2. The trackway

Overall the stone finds from the trackway are less obviously functional and less obviously selected than those from the platform. Context B5, which comprised a localized deposit of sand, yielded a large (unburnt) angular but water rolled cobble of Upper Greensand. The remainder fall within the pebble-size range. They include a Sarsen from context A4, a fragment of burnt Upper Greensand from context B13, and, from context B15, a sub-round chalk flint, a fragment of flint cortex, and an iron stained flint. Apart from the burnt Upper Greensand, which comes from a concentration of burnt flint, none show any signs of utilization.

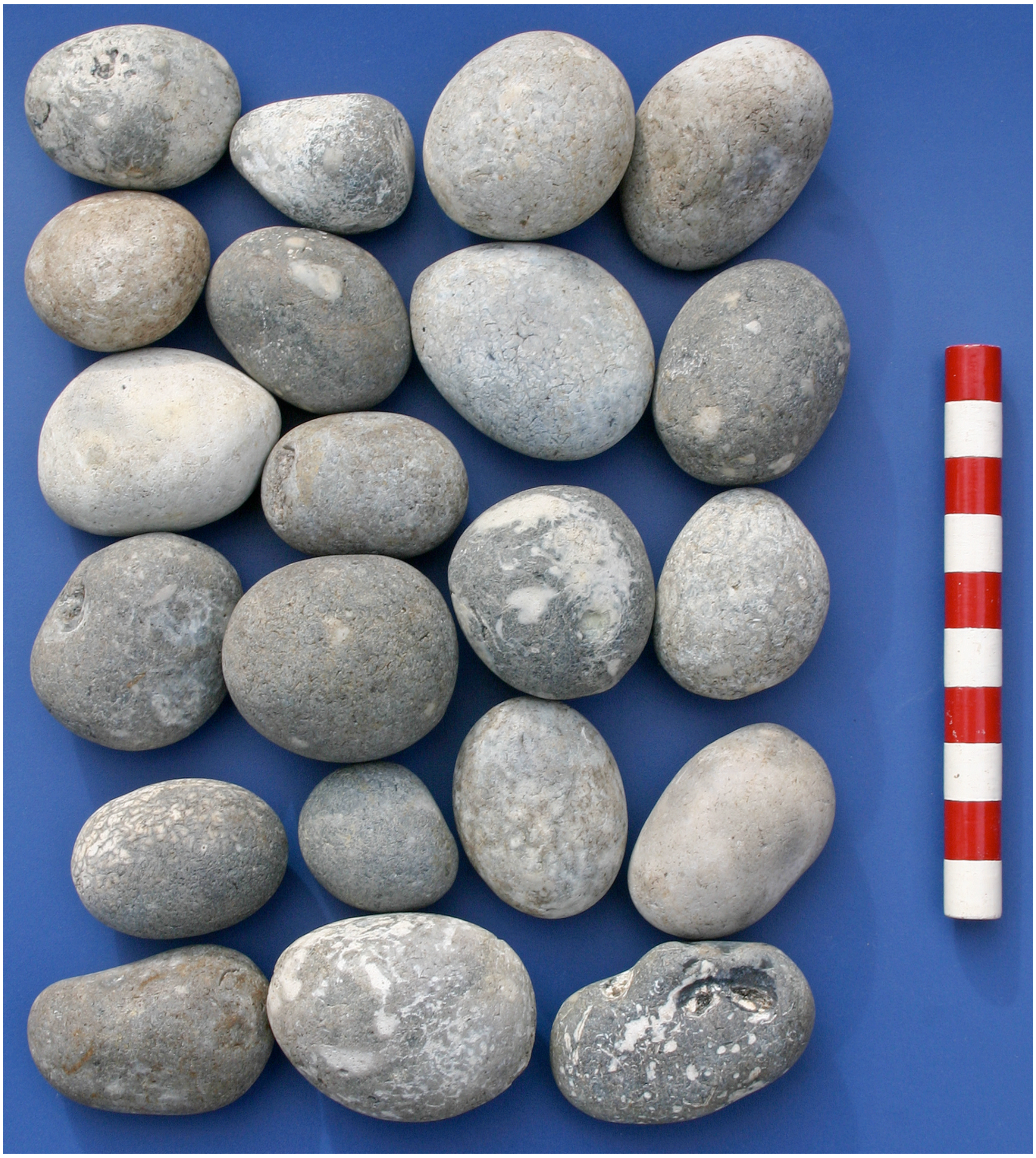

Figure 3. Sorted water rolled beach pebbles from the peat at Dittons. *Scale 80%*

3. Dittons

21 pebble-size water rolled flints (Fig. 3) come from the surface of the peat at Dittons, to the north of the platform. One has end batter of the sort associated with hammerstones (Fig. 4). Owing to the manner of their excavation, their exact relationships are unclear, but their sorting and their concentration in what was otherwise stone free peat indicates that they belong to a single group. Each weighs between 22 and 68 grams and is either sub-round or oval in shape. These proportions correspond to those of 'slingstones' from Iron Age Cissbury and other sites (Curwen & Williamson 1931, 30). The actual role of these is uncertain. However, the widespread occurrence of smaller groups of similarly sorted beach pebbles on later Bronze Age settlement sites, and their frequent association on these with

domestic rubbish suggests that during this period at least they had a domestic, rather than a martial role. The marshland environment in which the present finds were made suggests two alternative possibilities, firstly, that they were indeed used as slingstones, but for hunting wildfowl rather than people, and, secondly, that they were used to weight nets, possibly for the same purpose. (The bones of wildfowl were recovered from the platform).

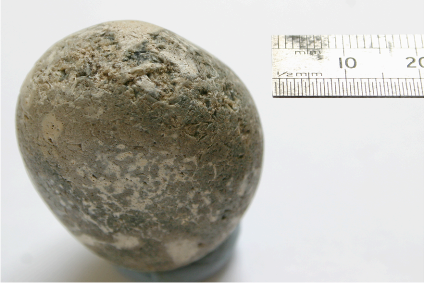

Figure 4. End battered beach pebble from Dittons

4. Site Resource Strategies

In terms both of the geology and geomorphology of the area, every stone within the foregoing assemblages is ‘foreign’. However, all have their origins nearby. The high visibility of the Upper Greensand outcrop at Eastbourne, the evidence for water rolling, both of greensand and flint, and the likely ease of recovery of flint from the downland cliffs immediately to the west of Eastbourne argue in favour of it as site’s the primary source of stone. Unlike assemblages from Late Bronze Age settlement sites to the north (e.g. Runnymede Bridge: Higbee 1996, 165) and west (e.g. Selsey: Seager Thomas 1998, 17), that from platform includes no far travelled material, indicating the possibility of a different stone resource strategy; otherwise its nature and interpretation is typical of contemporary (settlement) assemblages from the region.

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